

4. ENVIRONMENTAL SCREENING

Analysis of the impacts of transportation projects on communities and the natural environment historically occurred during individual project planning and design. This approach is reasonable, since many impacts cannot be accurately determined until specific design decisions have been made; however there are several important reasons for conducting an initial, system-level environmental screening of proposed transportation projects. A preliminary screening can identify potentially serious impacts that could result in significantly altering or even halting a project during the initial planning process. In addition, a system-level screening allows consideration of the interactions among various projects, and their combined impacts. Although system-level environmental screening does not substitute for detailed, project-specific review, this assessment can identify and highlight critical issues warranting further analysis.

This environmental screening process is focused on roadway projects. Most of the rail and transit projects in the CTP are associated with opening additional passenger rail terminals, expanding bus routes and services, and creating new park & ride lots (usually at existing parking lots). Such projects typically involve no new construction and have minimal impacts on either natural or man-made environments. The bicycle projects in the CTP usually include the addition of bicycle and pedestrian access or routes, often in conjunction with a proposed roadway project. Such facilities are more limited in the magnitude of their environmental and community impacts, due to smaller cross-sections and greater flexibility in design.

ENVIRONMENTAL IMPACTS

A qualitative screening was performed to assess the potential environmental impacts of the roadway projects proposed in the CTP. This analysis consisted of overlaying project alignments onto a series of maps depicting sensitive environmental resources (Figure 4-1) and community resources (Figure 4-2). Any proposed project determined to encroach on a resource was identified in the evaluation matrices (Table 4-1).

Since this is a system-wide, cursory screening, no formal field investigation was conducted, and screening could only be performed on those features for which GIS coverage was available. The environmental data used in the evaluation of CTP recommendations were obtained from North Carolina Department of Transportation, the FBRMPO, and other local jurisdictions. The following environmental and community resources were reviewed in conjunction with the proposed roadway projects:

Environmental

- Bodies of water / Wetlands
- Watersheds
- Water Systems (surface water intake, ground water intake, water storage tanks)
- Hazardous Substance Disposal Sites or Areas
- Water and Waste Treatment Facilities
- Conservation Areas
- Parks

Community

- Historic Districts and Structures